Search Results -

Terms	Documents
l1 and l2 and l13	7

Database: US Patents Full-Text Database
US Pre-Grant Publication Full-Text Database
JPO Abstracts Database
EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Refine Search: `l1 and l2 and l13` Clear

Search History

Today's Date: 6/13/2001

DB Name	Query	Hit Count	Set Name
USPT,PGPB,JPAB,EPAB,DWPI	l1 and l2 and l13	7	L30
USPT,PGPB,JPAB,EPAB,DWPI	gauglitz$.in. and l1	1	L29
USPT,PGPB,JPAB,EPAB,DWPI	steinwand$.in. and l1	1	L28
USPT,PGPB,JPAB,EPAB,DWPI	brecht$.in. and l1	1	L27
USPT,PGPB,JPAB,EPAB,DWPI	stemmler$.in. and l1	1	L26
USPT,PGPB,JPAB,EPAB,DWPI	l22 and l1	23	L25
USPT,PGPB,JPAB,EPAB,DWPI	((fluoresc$5 adj2 quench$3) near10 ((solid adj1 phase$1) or microwell$1 or microtiter$1 or well$1)) and l	28	L24
USPT,PGPB,JPAB,EPAB,DWPI	l2 and l22	15	L23
USPT,PGPB,JPAB,EPAB,DWPI	(fluoresc$5 adj2 quench$3) near10 ((solid adj1 phase$1) or microwell$1 or microtiter$1 or well$1)	47	L22
USPT,PGPB,JPAB,EPAB,DWPI	(fluoresc$5 adj2 quench$3) and l13 and l11 and l2	5	L21
USPT,PGPB,JPAB,EPAB,DWPI	((fluoresc$5 adj2 quench$3) near5 (solid adj1 phase$1)) and l11 and l2	0	L20
USPT,PGPB,JPAB,EPAB,DWPI	(fluoresc$5 adj2 quench$3) near5 (coat$3) near5 (solid adj1 phase$1)	0	L19
USPT,PGPB,JPAB,EPAB,DWPI	(fluoresc$5 adj2 quench$3) near3 (coat$3) near3 (solid adj1 phase$1)	0	L18
USPT,PGPB,JPAB,EPAB,DWPI	l13 and l1	34	L17
USPT,PGPB,JPAB,EPAB,DWPI	l13 and l9 and l1	7	L16
USPT,PGPB,JPAB,EPAB,DWPI	l12 and l13	4	L15
USPT,PGPB,JPAB,EPAB,DWPI	l10 and l13	4	L14
USPT,PGPB,JPAB,EPAB,DWPI	(solid adj1 phase$1) same (microtiter or nanotiter or microwell$1 or well$3) same quench$3	55	L13
USPT,PGPB,JPAB,EPAB,DWPI	l10 and l11	207	L12
USPT,PGPB,JPAB,EPAB,DWPI	(solid adj1 phase$1) same (microtiter or nanotiter or microwell$1 or well$3)	9203	L11
USPT,PGPB,JPAB,EPAB,DWPI	l9 and l8	320	L10
USPT,PGPB,JPAB,EPAB,DWPI	phase$1 near2 (different or separat$3)	129439	L9
USPT,PGPB,JPAB,EPAB,DWPI	((solid and liquid) near5 phase$1) and l7	417	L8
USPT,PGPB,JPAB,EPAB,DWPI	l5 and l6	1205	L7
USPT,PGPB,JPAB,EPAB,DWPI	phase$1 near10 (assay$3 or immunoassay$1)	7556	L6
USPT,PGPB,JPAB,EPAB,DWPI	(affinity or immunoaffinity or competitive or sandwich) and l4	3623	L5
USPT,PGPB,JPAB,EPAB,DWPI	((quantitat$3 or qualitat$3) or ((interact$3 or react$3) adj3 kinetic$1)) and l3	5826	L4
USPT,PGPB,JPAB,EPAB,DWPI	l1 and l2	14880	L3
USPT,PGPB,JPAB,EPAB,DWPI	phase$1 near5 (different or separat$3)	169789	L2
USPT,PGPB,JPAB,EPAB,DWPI	phase$1 and (assay$3 or immunoassay$1)	55311	L1

FILE 'MEDLINE, EMBASE, SCISEARCH, CAPLUS, BIOSIS' ENTERED AT 15:27:05 ON 13 JUN 2001

L1	83186	S	PHASE? (3A) (SEPARATION OR DIFFERENT)
L2	181586	S	PHASE (3A) (SOLID)
L3	147290	S	PHASE (3A) (LIQUID)
L4	163019	S	PHASE? (3A) (LIQUID)
L5	198135	S	PHASE? (3A) (SOLID)
L6	656	S	L1 AND L2 AND L3
L7	126	S	L6 AND ?ASSAY?
L8	0	S	L7 AND (FLUORESCENCE QUENCH?)
L9	0	S	L7 AND (FLUORESCENCE (5P) QUENCH?)
L10	25653	S	(FLUORESCENCE QUENCH?)
L11	125	S	L10 AND L1
L12	3	S	L11 AND L5
L13	14	S	L11 AND L4
L14	2	DUP REM	L12 (1 DUPLICATE REMOVED)
L15	10	DUP REM	L13 (4 DUPLICATES REMOVED)
L16	63	DUP REM	L11 (62 DUPLICATES REMOVED)
L17	59	DUP REM	L7 (67 DUPLICATES REMOVED)
L18	41	S	L7 AND (INTERACT? OR REACT? OR KINETIC?)
L19	18	S	L7 AND FLUORESCENCE
L20	0	S	L7 AND QUENCH?
L21	9	DUP REM	L19 (9 DUPLICATES REMOVED)
L22	19	DUP REM	L18 (22 DUPLICATES REMOVED)
L23	0	S	L18 AND (MICROTITER? OR MICROWELL?)
L24	0	S	L7 AND (MICROTITER? OR MICROWELL?)
L25	0	S	L6 AND (MICROTITER? OR MICROWELL?)
L26	34	S	L1 AND (MICROTITER? OR MICROWELL?)
L27	17	DUP REM	L26 (17 DUPLICATES REMOVED)
L28	1	S	L27 AND FLUORESCENCE

L14 ANSWER 2 OF 2 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 85125284 MEDLINE
DOCUMENT NUMBER: 85125284 PubMed ID: 3882272
TITLE: Fluoroimmunoassays and immunofluorometric assays.
AUTHOR: Hemmila I
SOURCE: CLINICAL CHEMISTRY, (1985 Mar) 31 (3) 359-70. Ref: 124
Journal code: DBZ; 9421549. ISSN: 0009-9147.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198504
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 19900320
Entered Medline: 19850403

AB Fluorescent probes and fluorometric methods have gained increasing interest in the field of clinical immunology, not only as one additional alternative to radioimmunoassays, but also in producing cheap, stable, and safe reagents and rapid and sensitive assays. One of the main goals has been the development of homogeneous assays: assays based on fluorescence polarization, **fluorescence quenching**, excitation transfer, or enzymically releasable probes are widely applied, especially in drug monitoring. The development of suitable **solid-phase separation** techniques has facilitated utilization of fluorescence in heterogeneous assays, which in general have wider applications, from proteins and viruses to small haptens. Lately new alternative fluorescent probes and methods have been introduced. For example, the use of fluorescent phycobiliproteins or porphyrin derivatives with long-wavelength emission and large Stokes shift or, in particular, the rare earth chelates with unique fluorescent properties well suited to time-resolved measurement have opened new possibilities towards more sensitive immunoassays.

AB . . . and sensitive assays. One of the main goals has been the development of homogeneous assays: assays based on fluorescence polarization, **fluorescence quenching**, excitation transfer, or enzymically releasable probes are widely applied, especially in drug monitoring. The development of suitable **solid-phase separation** techniques has facilitated utilization of fluorescence in heterogeneous assays, which in general have wider applications, from proteins and viruses to. . .

L21 ANSWER 1 OF 9 SCISEARCH COPYRIGHT 2001 ISI (R) DUPLICATE 1
ACCESSION NUMBER: 1999:142267 SCISEARCH
THE GENUINE ARTICLE: 165PR
TITLE: Selective trace enrichment by immunoaffinity capillary electrochromatography on-line with capillary zone electrophoresis - laser-induced **fluorescence**
AUTHOR: Thomas D H; Rakestraw D J; Schoeniger J S (Reprint); LopezAvila V; VanEmon J
CORPORATE SOURCE: SANDIA NATL LABS, POB 969 MS 9671, LIVERMORE, CA 94551 (Reprint); SANDIA NATL LABS, LIVERMORE, CA 94551; MIDWEST RES INST, CALIF OPERAT, MT VIEW, CA; US EPA, NATL EXPOSURE RES LAB, HUMAN EXPOSURE RES BRANCH, LAS VEGAS, NV 89193
COUNTRY OF AUTHOR: USA
SOURCE: ELECTROPHORESIS, (JAN 1999) Vol. 20, No. 1, pp. 57-66. Publisher: WILEY-V C H VERLAG GMBH, MUHLENSTRASSE 33-34, D-13187 BERLIN, GERMANY. ISSN: 0173-0835.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 30

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Limited by the lack of a sensitive, universal detector, many capillary-based **liquid-phase separation** techniques might benefit from techniques that overcome modest concentration sensitivity by preconcentrating large injection volumes. The work presented employs selective **solid-phase** extraction by immunoaffinity capillary electrochromatography (IACEC) to enhance detection limits. A model analyte, fluorescein isothiocyanate (FITC) biotin, is electrokinetically applied to a capillary column packed with an immobilized anti-biotin-IgG support. After selective extraction by the immunoaffinity capillary, the bound analyte is eluted, migrates by capillary zone electrophoresis (CZE), and is detected by laser-induced **fluorescence**. The column is regenerated and reused many times. We evaluate the performance of IACEC for selective trace enrichment of analytes prior to CZE. The calibration curve for FITC-biotin bound versus application time is linear from 10 to 300 seconds. Recovery of FITC-biotin spiked into a diluted urinary metabolites solution was 89.4% Versus spiked buffer, with a precision of 1.8% relative standard deviation (RSD).

TI Selective trace enrichment by immunoaffinity capillary electrochromatography on-line with capillary zone electrophoresis - laser-induced **fluorescence**

AB Limited by the lack of a sensitive, universal detector, many capillary-based **liquid-phase separation** techniques might benefit from techniques that overcome modest concentration sensitivity by preconcentrating large injection volumes. The work presented employs selective **solid-phase** extraction by immunoaffinity capillary electrochromatography (IACEC) to enhance detection limits. A model analyte, fluorescein isothiocyanate (FITC) biotin, is electrokinetically applied. . . by the immunoaffinity capillary, the bound analyte is eluted, migrates by capillary zone electrophoresis (CZE), and is detected by laser-induced

fluorescence. The column is regenerated and reused many times. We evaluate the performance of IACEC for selective trace enrichment of analytes. . .
STP KeyWords Plus (R): AFFINITY-CHROMATOGRAPHY; ISOTACHOPHORESIS; PRECONCENTRATION; PRETREATMENT; **IMMUNOASSAY**; BINDING

L21 ANSWER 2 OF 9 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 97086383 EMBASE
DOCUMENT NUMBER: 1997086383
TITLE: Quantitation of an orally available thrombin inhibitor in rat, monkey and human plasma and in human urine by high-performance liquid chromatography and fluorescent post-column derivatization of arginine.
AUTHOR: Mendoza C.B.; Dixon S.A.; Lods M.M.; Ma M.G.; Nguyen K.T.; Nutt R.F.; Tran H.S.; Nolan T.G.
CORPORATE SOURCE: T.G. Nolan, Corvas International, Department of Analytical Chemistry, 3030 Science Park Road, San Diego, CA 92121-1102, United States
SOURCE: Journal of Chromatography A, (1997) 762/1-2 (299-310). Refs: 16
ISSN: 0021-9673 CODEN: JCRAEY
PUBLISHER IDENT.: S 0021-9673(96)00865-5
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Conference Article
FILE SEGMENT: 025 Hematology
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB An **assay** for the quantification of plasma and urine levels of CVS 1123, an orally bioavailable thrombin inhibitor, and its desmethyl form, CVS 738, was developed to support clinical and toxicology studies. This **assay** uses **solid-phase** extraction, reversed-**phase** HPLC **separation**, and post-column fluorescent derivatization with ninhydrin. An internal standard is added to correct for recovery. In aqueous solution, the arginine aldehyde structures of CVS 1123 and CVS 738 exist in multiple forms which can be separated under standard reversed-phase HPLC conditions. HPLC conditions were optimized to give rapid interconversion of the forms on the separation time scale, and consequently a single chromatographic peak. Extraction conditions were modified for quantitative extraction of drug compounds from large volumes of human plasma. The **assay** was shown to be accurate and precise, with a quantification limit of 17 ng CVS
1123/ml human plasma.
AB An **assay** for the quantification of plasma and urine levels of CVS 1123, an orally bioavailable thrombin inhibitor, and its desmethyl form, CVS 738, was developed to support clinical and toxicology studies. This **assay** uses **solid-phase** extraction, reversed-**phase** HPLC **separation**, and post-column fluorescent derivatization with ninhydrin. An internal standard is added to correct for recovery. In aqueous solution, the arginine. . . single chromatographic peak. Extraction conditions were modified for quantitative
extraction of drug compounds from large volumes of human plasma. The **assay** was shown to be accurate and precise, with a quantification limit of 17 ng CVS 1123/ml human plasma.
CT Medical Descriptors:
*drug blood level
*drug urine level
accuracy
animal tissue
conference paper
controlled study
derivatization
drug determination

fluorescence
high performance liquid chromatography
human
human tissue
monkey
nonhuman
priority journal
quantitative assay
rat
reversed phase high performance liquid chromatography
solid phase extraction
technique
*cvs 1123: AN, drug analysis
*cvs 1123: CR, drug concentration
*thrombin inhibitor: AN, drug analysis
*thrombin inhibitor: CR, drug concentration
unclassified drug

L21 ANSWER 3 OF 9 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 96285926 MEDLINE
DOCUMENT NUMBER: 96285926 PubMed ID: 8704933
TITLE: Liquid chromatographic **assay** for a butenolide endothelin antagonist (PD 156707) in plasma.
AUTHOR: Rossi D T; Hallak H; Bradford L
CORPORATE SOURCE: Department of Pharmacokinetics and Drug Metabolism, Parke-Davis Pharmaceutical Research, Division of Warner Lambert Company, Ann Arbor, MI 48105, USA.
SOURCE: JOURNAL OF CHROMATOGRAPHY. B, BIOMEDICAL APPLICATIONS, (1996 Mar 3) 677 (2) 299-304.
Journal code: BXL; 9421796. ISSN: 0378-4347.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199609
ENTRY DATE: Entered STN: 19960919
Last Updated on STN: 19960919
Entered Medline: 19960912

AB A sensitive and selective liquid chromatographic **assay** for determining the non-peptide endothelin A receptor antagonist PD 156707 (I) in rat plasma has been developed and validated. The analyte was isolated from matrix by **solid-phase** extraction. **Liquid** chromatographic **separation** was achieved isocratically on a 3.2 mm I.D., ODS column with a mobile phase of acetonitrile-ammonium phosphate (50 mM, pH 3.5) (44:56, v/v). Column effluent was monitored fluorometrically. Peak-height ratios (analyte/IS) were proportional to I concentrations in rat plasma from 25 to 1000 ng/ml. **Assay** precision and accuracy for I, based on quality controls, was 9.5% relative standard deviation, with relative error of +/- 6.5%. The quantitation limit was 25 ng/ml for a 200-microliters sample aliquot.
TI Liquid chromatographic **assay** for a butenolide endothelin antagonist (PD 156707) in plasma.
AB A sensitive and selective liquid chromatographic **assay** for determining the non-peptide endothelin A receptor antagonist PD 156707 (I) in rat plasma has been developed and validated. The analyte was isolated from matrix by **solid-phase** extraction. **Liquid** chromatographic **separation** was achieved isocratically on a 3.2 mm I.D., ODS column with a mobile phase of acetonitrile-ammonium phosphate (50 mM, pH. . . effluent was monitored fluorometrically. Peak-height ratios (analyte/IS) were proportional to I concentrations in rat plasma from 25 to 1000 ng/ml. **Assay** precision and accuracy for I, based

on quality controls, was 9.5% relative standard deviation, with relative error of +/- 6.5%.. . .

CT . . .
Pressure Liquid: MT, methods
*Dioxoles: BL, blood
Rats
*Receptors, Endothelin: AI, antagonists & inhibitors
Reproducibility of Results
Sensitivity and Specificity
Spectrometry, Fluorescence

L21 ANSWER 4 OF 9 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 96166988 EMBASE
DOCUMENT NUMBER: 1996166988
TITLE: Determination of alosetron in human plasma or serum by high-performance liquid chromatography with robotic sample preparation.
AUTHOR: Lloyd T.L.; Gupta S.K.; Gooding A.E.; Alianti J.R.
CORPORATE SOURCE: Glaxo Research Institute, 5 Moore Drive,Research Triangle Park, NC 27709, United States
SOURCE: Journal of Chromatography B: Biomedical Applications, (1996) 678/2 (261-267).
ISSN: 0378-4347 CODEN: JCBBEP
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 027 Biophysics, Bioengineering and Medical Instrumentation
029 Clinical Biochemistry
032 Psychiatry
048 Gastroenterology
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB A method of analysis for the determination of alosetron in human plasma or
serum has been developed. The method was fully automated using a laboratory robot in order to improve analytical precision, efficiency and safety. The **assay** involved **solid-phase** extraction with reversed-**phase** HPLC **separation** and **fluorescence** detection. A validation exercise over the concentration range of 0.1 to 20 ng/ml demonstrated the selectivity, linearity, sensitivity, accuracy, precision, extraction efficiency, ruggedness and stability of the method. The method has been applied in support of numerous human pharmacokinetic/biopharmaceutic studies over the
last five years.
AB . . . developed. The method was fully automated using a laboratory robot in order to improve analytical precision, efficiency and safety. The
assay involved **solid-phase** extraction with reversed-**phase** HPLC **separation** and **fluorescence** detection. A validation exercise over the concentration range of 0.1 to 20 ng/ml demonstrated the selectivity, linearity, sensitivity, accuracy, precision,. . .
CT Medical Descriptors:
*drug blood level
*drug determination
article
controlled study
fluorescence
high performance liquid chromatography
human
human experiment
human tissue
oral drug administration

priority journal
reversed phase high performance liquid chromatography
robotics
solid phase extraction
technique
*alosetron: AN, drug analysis
*alosetron: PK, pharmacokinetics
*alosetron: CR, drug concentration

L21 ANSWER 5 OF 9 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 96043270 MEDLINE
DOCUMENT NUMBER: 96043270 PubMed ID: 7496992
TITLE: Mammalian secreted and cytosolic phospholipase A2 show different specificities for phospholipid molecular species.
AUTHOR: Burdge G C; Creaney A; Postle A D; Wilton D C
CORPORATE SOURCE: Department of Biochemistry, University of Southampton, U.K.
SOURCE: INTERNATIONAL JOURNAL OF BIOCHEMISTRY AND CELL BIOLOGY, (1995 Oct) 27 (10) 1027-32.
Journal code: CDK; 9508482. ISSN: 1357-2725.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199601
ENTRY DATE: Entered STN: 19960217
Last Updated on STN: 19960217
Entered Medline: 19960117

AB Previous studies using phospholipid vesicles containing single molecular species have shown cytosolic phospholipase (85 kDa) (PL) A2 to possess a marked preference for arachidonic acid (20:4n-6)-containing species, while secreted PLA2 (14 kDa) exhibited little acyl chain selectivity. In this study, we have defined the molecular specificity of cytosolic PLA2 using phospholipid vesicles derived from rat liver which contain complex mixtures of molecular species. Phosphatidylcholine (PC) and phosphatidylethanolamine (PE) were isolated from rat liver by chloroform and methanol extraction, and **solid-phase separation**. PC and PE vesicles were hydrolysed by either human recombinant cytosolic or porcine pancreatic PLA2. Molecular species compositions were determined by reverse **phase** high performance **liquid** chromatography (HPLC) with post-column **fluorescence** derivitisation. HPLC analysis after limited hydrolysis demonstrated that the secreted phospholipase A2 showed no significant acyl chain specificity using these phospholipid mixtures. However, the cytosolic enzyme demonstrated a high degree of preference for arachidonic acid-containing species such that there was no hydrolysis of other molecular species. The extent of hydrolysis of PC16:0/20:4 was 1.4-fold greater ($P < 0.05$, $n = 3$) than PC18:0/20:4, while PE16:0/20:4 and PE18:0/20:4 were hydrolysed to a similar degree. Under these **assay** conditions, the cytosolic enzyme showed a preference for PE as compared with PC. This study confirms that cytosolic PLA2 is highly selective for sn-2 20:4n-6-containing phospholipid molecular species even when presented with a complex natural species mixture. This specificity is consistent with the cytosolic enzyme having a primary role in the process of arachidonic release within cells.(ABSTRACT TRUNCATED AT 250 WORDS)

AB . . . mixtures of molecular species. Phosphatidylcholine (PC) and phosphatidylethanolamine (PE) were isolated from rat liver by chloroform and methanol extraction, and **solid-phase separation**. PC and PE vesicles were hydrolysed by either human recombinant cytosolic or porcine pancreatic PLA2. Molecular species compositions were determined by reverse **phase** high performance

liquid chromatography (HPLC) with post-column **fluorescence** derivitisation. HPLC analysis after limited hydrolysis demonstrated that the secreted phospholipase A2 showed no significant acyl chain specificity using these. . . ($P < 0.05$, $n = 3$) than PC18:0/20:4, while PE16:0/20:4 and PE18:0/20:4 were hydrolysed to a similar degree. Under these **assay** conditions, the cytosolic enzyme showed a preference for PE as compared with PC. This study confirms that cytosolic PLA2 is. . .

L21 ANSWER 6 OF 9 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 95005369 MEDLINE
DOCUMENT NUMBER: 95005369 PubMed ID: 7921173
TITLE: Determination of a novel hematoregulatory peptide in dog plasma by reversed-**phase** high-performance **liquid** chromatography and an amine-selective o-phthaldialdehyde-thiol post-column reaction with **fluorescence** detection.
AUTHOR: Boppana V K; Miller-Stein C
CORPORATE SOURCE: Department of Drug Metabolism and Pharmacokinetics, SmithKline Beecham Pharmaceuticals, King of Prussia, PA-19406.
SOURCE: JOURNAL OF CHROMATOGRAPHY. A, (1994 Jul 29) 676 (1) 161-7. Journal code: BXJ; 9318488.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199410
ENTRY DATE: Entered STN: 19941222
Last Updated on STN: 19941222
Entered Medline: 19941025

AB A sensitive and selective high-performance liquid chromatographic method was developed for the determination of SB 107647 (I), a novel synthetic hematoregulatory peptide, in plasma samples of dog and rat. The method involves isolation of I and the internal standard (SB 203285, IS) from plasma by a **solid-phase** anion-exchange extraction column prior to reversed-**phase** ion-pair chromatographic **separation** on an octyl silica column. Following separation, a selective post-column reaction of the epsilon-amino groups of the lysine moieties of the peptide with o-phthaldialdehyde and a thiol under basic conditions was used to generate a highly fluorescent isoindole product, which was subsequently detected on-line with a fluorometer. Optimization of chromatographic conditions resulted in an on-column detection limit of 1 ng. The recovery of I from dog plasma at 20 and 4000 ng/ml was 50.0 +/- 5.94 and 56.6 +/- 1.45% (Mean +/- S.D.), respectively. The limit of quantification for I, for 0.25-ml plasma samples, was 20 ng/ml. Linear response was observed for concentrations of I ranging from 20 to 4000 ng/ml of plasma. The **assay** was sufficiently sensitive, accurate and precise to support toxicokinetic studies in animal species.

TI Determination of a novel hematoregulatory peptide in dog plasma by reversed-**phase** high-performance **liquid** chromatography and an amine-selective o-phthaldialdehyde-thiol post-column reaction with **fluorescence** detection.

AB . . . dog and rat. The method involves isolation of I and the internal standard (SB 203285, IS) from plasma by a **solid-phase** anion-exchange extraction column prior to reversed-**phase** ion-pair chromatographic **separation** on an octyl silica column. Following separation, a selective post-column reaction of the epsilon-amino groups of the lysine moieties of. . . was 20 ng/ml. Linear response was observed for concentrations of I ranging from 20 to 4000 ng/ml of plasma. The **assay** was sufficiently sensitive, accurate and precise to support toxicokinetic studies in animal species.

L21 ANSWER 7 OF 9 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 93029264 EMBASE
DOCUMENT NUMBER: 1993029264

TITLE: Method for the determination of indole-3-acetic acid and related compounds of L-tryptophan catabolism in soils.
AUTHOR: Lebuhn M.; Hartmann A.
CORPORATE SOURCE: GSF, Forsch.-zent. Umwelt/Gesundheit GmbH, Institut fur Bodenokologie, Ingolstadter Landstrasse 1,W-8042 Neuherberg, Germany
SOURCE: Journal of Chromatography, (1993) 629/2 (255-266). ISSN: 0021-9673 CODEN: JOCRAM
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
046 Environmental Health and Pollution Control
LANGUAGE: English
SUMMARY LANGUAGE: English

AB An optimized method for the determination of substances occurring in auxin metabolism and L-tryptophan (TRP) catabolism was developed. It is based on **solid-phase** extraction (SPE), two isocratic reversed-**phase** high-performance **liquid** chromatographic (HPLC) separations at **different liquid phase** conditions and the simultaneous detection of **fluorescence** and UV absorbance at different wavelengths. Advantages of the proposed method are: the solvent (ethanol) and **liquid phase** (containing 2-propanol) provide optimum stability and selectivity; almost no toxic wastes are produced; no time-consuming liquid-liquid extractions (LLE), derivatization procedures or column re-equilibration (obligatory for gradient systems) are necessary, no need for antioxidants, ion-pair or derivatization reagents; recovery rates of the SPE system are superior to LLE effeciencies; high sensitivity, selectivity and identification capacity are provided by the proposed HPLC and detection system. By measuring various chromatographic and spectral parameters simultaneously, the determination reliability is improved. The characteristic chromatographic and spectral data for selected indole derivatives and TRP catabolites are presented. In samples from two different soils that were tested with the proposed method, the actual contents of TRP were 1.4 and 5.8 .mu.g/g dry soil. In addition, traces of indole-3-acetic acid (IAA) could be detected. When TRP was added, IAA was the predominant catabolite in both soils, and reached values of 2.9 and 8.0 .mu.g/g dry soil. In addition to IAA, indole-3-ethanol, indole-3-aldehyde, indole-3-carboxylic acid, indole-3-lactic acid, anthranilic acid and traces of indole-3-acetamide were identified and determined.

AB . . . method for the determination of substances occurring in auxin metabolism and L-tryptophan (TRP) catabolism was developed. It is based on **solid-phase** extraction (SPE), two isocratic reversed-**phase** high-performance **liquid** chromatographic (HPLC) separations at **different liquid phase** conditions and the simultaneous detection of **fluorescence** and UV absorbance at different wavelengths. Advantages of the proposed method are: the solvent (ethanol) and **liquid phase** (containing 2-propanol) provide optimum stability and selectivity; almost no toxic wastes are produced; no time-consuming liquid-liquid extractions (LLE), derivatization procedures. . .

CT Medical Descriptors:
***assay**
article
catabolism
priority journal
soil
*indoleacetic acid
*tryptophan

L21 ANSWER 8 OF 9 MEDLINE DUPLICATE 5
ACCESSION NUMBER: 88115776 MEDLINE

DOCUMENT NUMBER: 88115776 PubMed ID: 3429585
TITLE: Liquid chromatographic determination of sotalol in plasma and urine employing **solid-phase** extraction and **fluorescence** detection.
AUTHOR: Bartek M J; Vekshteyn M; Boarman M P; Gallo D G
CORPORATE SOURCE: Department of Metabolism and Pharmacokinetics, Bristol-Myers Company, Evansville, IN 47721.
SOURCE: JOURNAL OF CHROMATOGRAPHY, (1987 Oct 30) 421 (2) 309-18. Journal code: HQF; 0427043. ISSN: 0021-9673.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198803
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880322

AB A liquid chromatographic method using a **solid-phase** extraction procedure for the quantification of sotalol in plasma and urine is described. Sotalol is eluted from an extraction column with ethyl acetate-acetonitrile (1:2) and, after **separation** by reversed-**phase** high-performance **liquid** chromatography on a mu Bondapak C18 column, is quantified by **fluorescence** detection at excitation and emission wavelengths of 240 and 310 nm, respectively. The method has been demonstrated to be linear over the concentration ranges 10-6000 ng/ml in plasma and 0.5-100 micrograms/ml in urine. Mean inter-**assay** accuracy of the method for plasma ranged from 93 to 100% and for urine from 102 to 114%; precision ranged from 0.5 to 1.6% for plasma over a concentration range of 200-4000 ng/ml and for urine from 0.7 to 2.0% at concentrations of 2-50 micrograms/ml. Mass spectrometry confirmed the presence of sotalol in isolated chromatographic fractions of plasma and urine extracts from subjects given sotalol orally.

TI Liquid chromatographic determination of sotalol in plasma and urine employing **solid-phase** extraction and **fluorescence** detection.

AB A liquid chromatographic method using a **solid-phase** extraction procedure for the quantification of sotalol in plasma and urine is described. Sotalol is eluted from an extraction column with ethyl acetate-acetonitrile (1:2) and, after **separation** by reversed-**phase** high-performance **liquid** chromatography on a mu Bondapak C18 column, is quantified by **fluorescence** detection at excitation and emission wavelengths of 240 and 310 nm, respectively. The method has been demonstrated to be linear over the concentration ranges 10-6000 ng/ml in plasma and 0.5-100 micrograms/ml in urine. Mean inter-**assay** accuracy of the method for plasma ranged from 93 to 100% and for urine from 102 to 114%; precision ranged. . .

CT . . . Human
Chromatography, High Pressure Liquid
Chromatography, Liquid
Drug Stability
Mass Fragmentography
*Sotalol: AN, analysis
Sotalol: BL, blood
Sotalol: UR, urine
Spectrometry, Fluorescence

L21 ANSWER 9 OF 9 MEDLINE
ACCESSION NUMBER: 86304791 MEDLINE
DOCUMENT NUMBER: 86304791 PubMed ID: 3745383
TITLE: **Solid-phase** extraction and determination of dansyl derivatives of unconjugated and acetylated polyamines by reversed-**phase** **liquid** chromatography: improved **separation** systems for polyamines in cerebrospinal fluid, urine and

tissue.

AUTHOR: Kabra P M; Lee H K; Lubich W P; Marton L J

CONTRACT NUMBER: CA-13525 (NCI)
CA-37606 (NCI)
SOURCE: JOURNAL OF CHROMATOGRAPHY, (1986 Jul 11) 380 (1) 19-32.
Journal code: HQF; 0427043. ISSN: 0021-9673.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198610
ENTRY DATE: Entered STN: 19900321
Last Updated on STN: 19970203
Entered Medline: 19861002

AB A sensitive and simple liquid chromatographic **assay** with fluorometric detection for unconjugated and acetylated polyamines in biological fluids is described. After precolumn derivatization with dansyl chloride, unconjugated polyamines and acetylated polyamines were extracted by elution from a Bond-Elut C18 column and then separated on a reversed-phase column with gradient elution. The complete analysis of unconjugated putrescine, spermidine, and spermine in either hydrolyzed urine, cerebrospinal fluid or tissue could be accomplished within 20-26 min, while the simultaneous analysis of unconjugated polyamines and monoacetylpolyamines could be completed within 40 min. Unhydrolyzed urine and cerebrospinal fluid required a Bond-Elut cation-exchange clean-up before dansylation. Standard curves for the **assay** were linear up to 20 nmol/ml, and the within-day and day-to-day coefficients of variation were between 1.1 and 4.6% and between 1.6 and 11.8%, respectively. Results obtained with the method were compared with results obtained with a well established modified amino acid analyzer method for urine, tissue and cerebrospinal fluid samples. The correlation coefficients between these two methods were in the range 0.933-0.996. Detection limits between 50 and 150 fmol were achieved for unconjugated and acetylated polyamines. Of more than twenty drugs and amines tested for possible interference with the **assay**, only normetanephrine was found to have the same retention time as the internal standard 1,6-diaminohexane.

TI **Solid-phase** extraction and determination of dansyl derivatives of unconjugated and acetylated polyamines by reversed-**phase liquid** chromatography: improved **separation** systems for polyamines in cerebrospinal fluid, urine and tissue.

AB A sensitive and simple liquid chromatographic **assay** with fluorometric detection for unconjugated and acetylated polyamines in biological fluids is described. After precolumn derivatization with dansyl chloride, unconjugated. . . completed within 40 min. Unhydrolyzed urine and cerebrospinal fluid required a Bond-Elut cation-exchange clean-up before dansylation. Standard curves for the **assay** were linear up to 20 nmol/ml, and the within-day and day-to-day coefficients of variation were between 1.1 and 4.6% and. . . were achieved for unconjugated and acetylated polyamines. Of more than twenty drugs and amines tested for possible interference with the **assay**, only normetanephrine was found to have the same retention time as the internal standard 1,6-diaminohexane.

CT . . .
High Pressure Liquid
*Dansyl Compounds: AN, analysis
Indicators and Reagents
*Polyamines: AN, analysis

Polyamines: CF, cerebrospinal fluid
Polyamines: UR, urine
Spectrometry, Fluorescence

L22 ANSWER 7 OF 19 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 97343989 MEDLINE
DOCUMENT NUMBER: 97343989 PubMed ID: 9200516
TITLE: High speed liquid chromatography of phenylethanolamines for the **kinetic** analysis of [11C]-meta-hydroxyephedrine and metabolites in plasma.
AUTHOR: Link J M; Synovec R E; Krohn K A; Caldwell J H
CORPORATE SOURCE: Department of Radiology, University of Washington, Seattle 98195-6004, USA.
CONTRACT NUMBER: HL 50238 (NHLBI)
HL50239 (NHLBI)
SOURCE: JOURNAL OF CHROMATOGRAPHY. B, BIOMEDICAL SCIENCES AND APPLICATIONS, (1997 May 23) 693 (1) 31-41.
Journal code: CXN; 9714109. ISSN: 1387-2273.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199708
ENTRY DATE: Entered STN: 19970902
Last Updated on STN: 19980206
Entered Medline: 19970820

AB A method is developed and described for analysis of [11C]-meta-hydroxyephedrine, [11C]MHED, a tracer of cardiac function, and its metabolites in plasma samples. The method combines on-column **solid-phase** extraction and **separation** on a single weak cation-exchange column. Phenylethanolamines were used to develop the separation method that concentrates the analytes on-column from physiological saline and then elutes them by changing to an acidic mobile phase. Hydrophobic **interactions** determine the selectivity, and elution order is the same as for reversed-**phase liquid** chromatography on a C1 stationary **phase**. The mechanism of **separation** is mixed mode, with ion-exchange coupled with a reversed-**phase liquid** chromatography mechanism. Each sample analysis requires only 10 min and does not require deproteinization or the use of organic solvents. In human samples, a single plasma metabolite of [11C]MHED along with the parent compound were observed using this method. The method was sufficiently rapid so that in 70 min seven samples were **assayed**, providing a well-defined time course for MHED and its metabolites in blood. The metabolite concentration increased with time to approximately 85% of the plasma activity 50 min after administration. The results with the developed method are comparable to those described for reversed-phase separations, with the advantage that our method does not require deproteinization, reducing sample analysis time by a factor of two.

TI High speed liquid chromatography of phenylethanolamines for the **kinetic** analysis of [11C]-meta-hydroxyephedrine and metabolites in plasma.

AB . . . for analysis of [11C]-meta-hydroxyephedrine, [11C]MHED, a tracer of cardiac function, and its metabolites in plasma samples. The method combines on-column **solid-phase** extraction and **separation** on a single weak cation-exchange column. Phenylethanolamines were used to develop the separation method that concentrates the analytes on-column from physiological saline and then elutes them by changing to an acidic mobile phase. Hydrophobic

interactions determine the selectivity, and elution order is the same as for reversed-**phase liquid** chromatography on a C1 stationary **phase**. The mechanism of **separation** is mixed mode, with ion-exchange coupled with a reversed-**phase liquid** chromatography mechanism. Each sample analysis requires only 10 min and does not require deproteinization or the use of organic solvents.. . . parent compound were observed using this method. The method was sufficiently rapid so that in 70 min seven samples were **assayed**, providing a well-defined time course for MHED and its metabolites in blood. The metabolite concentration increased with time to approximately. . .

L22 ANSWER 8 OF 19 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 97084423 MEDLINE
DOCUMENT NUMBER: 97084423 PubMed ID: 8930766
TITLE: **Assay** for taurine conjugates of bile acids in serum by reversed-**phase** high-performance **liquid** chromatography.
AUTHOR: Paauw J D; Van Wyk L; Davis A T
CORPORATE SOURCE: Department of Surgery, Michigan State University and Butterworth Hospital, MI 495113, USA.
SOURCE: JOURNAL OF CHROMATOGRAPHY. B, BIOMEDICAL APPLICATIONS, (1996 Oct 11) 685 (1) 171-5.
Journal code: BXL; 9421796. ISSN: 0378-4347.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199702
ENTRY DATE: Entered STN: 19970305
Last Updated on STN: 19970305
Entered Medline: 19970218

AB The purpose of this study was to develop a new high-performance liquid chromatographic (HPLC) procedure for quantifying taurine conjugates of bile acids in serum. The technique involved three basic steps. The first removed free amino acids via **solid-phase** extraction of the serum. The second step involved the **reaction** of the extracted serum with the enzyme choloylglycine hydrolase, which liberated the taurine from the conjugated bile acids. The third step was the reversed-**phase** HPLC **separation** of o-phthalicdicarboxaldehyde derivatives of taurine. The **assay** provides a simple technique for determination of the total amount of taurine-conjugated bile acids in serum.

TI **Assay** for taurine conjugates of bile acids in serum by reversed-**phase** high-performance **liquid** chromatography.

AB . . . taurine conjugates of bile acids in serum. The technique involved three basic steps. The first removed free amino acids via **solid-phase** extraction of the serum. The second step involved the **reaction** of the extracted serum with the enzyme choloylglycine hydrolase, which liberated the taurine from the conjugated bile acids. The third step was the reversed-**phase** HPLC **separation** of o-phthalicdicarboxaldehyde derivatives of taurine. The **assay** provides a simple technique for determination of the total amount of taurine-conjugated bile acids in serum.

L22 ANSWER 14 OF 19 MEDLINE DUPLICATE 6
ACCESSION NUMBER: 91340933 MEDLINE
DOCUMENT NUMBER: 91340933 PubMed ID: 1874864
TITLE: **Solid-phase** extraction of plasma vasopressin: evaluation, validation and application.
AUTHOR: Van de Heijning B J; Koekkoek-van den Herik I; Ivanyi T; Van Wimersma Greidanus T B
CORPORATE SOURCE: Department of Pharmacology, Rudolf Magnus Institute, University of Utrecht, The Netherlands.
SOURCE: JOURNAL OF CHROMATOGRAPHY, (1991 Apr 19) 565 (1-2) 159-71. Journal code: HQF; 0427043. ISSN: 0021-9673.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199109
ENTRY DATE: Entered STN: 19911013
Last Updated on STN: 19911013
Entered Medline: 19910924

AB A new **solid-phase** extraction method using octyl-silica columns to extract vasopressin-like immunoreactivity from plasma has been developed. The extraction was followed by a **radioimmunoassay** on the vacuum-dried extracts, which were reconstituted in **assay** buffer. The total recovery of synthetic vasopressin was ca. 100%. Based on co-elution with synthetic vasopressin after **separation** by reversed-**phase** high-performance **liquid** chromatography of plasma extracts from normal Wistar and Brattleboro rats, and the cross-**reactivity** of the antiserum used in the **radioimmunoassay** system, the extracted material was found to be indistinguishable from authentic vasopressin. Unknown experimental samples were interpolated on a standard curve established in "zero" plasma (plasma derived from rats subjected to waterload) spiked with known amounts of synthetic vasopressin, and not on a standard curve established in **assay** buffer. The limit of detection was 1 fmol of vasopressin equivalent per millilitre. The intra- and inter-**assay** coefficients of variance were 10-16% and 16%, respectively. The procedure reliably showed that osmotic challenge and 24-h dehydration increased, whereas ethanol ingestion decreased vasopressin-like immunoreactivity plasma levels in the rat, compared with normally hydrated controls.

TI **Solid-phase** extraction of plasma vasopressin: evaluation, validation and application.

AB A new **solid-phase** extraction method using octyl-silica columns to extract vasopressin-like immunoreactivity from plasma has been developed. The extraction was followed by a **radioimmunoassay** on the vacuum-dried extracts, which were reconstituted in **assay** buffer. The total recovery of synthetic vasopressin was ca. 100%. Based on co-elution with synthetic vasopressin after **separation** by reversed-**phase** high-performance **liquid** chromatography of plasma extracts from normal Wistar and Brattleboro rats, and the cross-**reactivity** of the antiserum used in the **radioimmunoassay** system, the extracted material was found to be indistinguishable from authentic vasopressin. Unknown experimental samples were interpolated on a

standard. . . from rats subjected to waterload) spiked with known amounts of synthetic vasopressin, and not on a standard curve established in **assay** buffer. The limit of detection was 1 fmol of vasopressin equivalent per millilitre. The intra- and inter-**assay** coefficients of variance were 10-16% and 16%, respectively. The procedure reliably showed that osmotic challenge and 24-h dehydration increased, whereas. . .

CT Check Tags: Animal; Male
*Chromatography, High Pressure Liquid: MT, methods
Radioimmunoassay
Rats
Rats, Inbred BB
Rats, Inbred Strains
*Vasopressins: BL, blood

L11 ANSWER 1 OF 40 USPATFULL
AN 2001:79295 USPATFULL
TI Energy transfer hybridization assay composition
IN Rabbani, Elazar, New York, NY, United States
Hurley, Ian, Staten Island, NY, United States
PA Enzo Diagnostics, Inc., Farmingdale, NY, United States (U.S. corporation)
PI US 6239271 B1 20010529
AI US 1999-386695 19990831 (9)
RLI Continuation of Ser. No. US 1995-486053, filed on 7 Jun 1995, now patented, Pat. No. US 5998135, issued on 7 Dec 1999 Continuation of Ser.
No. US 1994-194215, filed on 9 Feb 1994, now abandoned Continuation of Ser. No. US 1989-314995, filed on 24 Feb 1989, now abandoned
DT Utility
LN.CNT 740
INCL INCLM: 536/024.300
NCL NCLM: 536/024.300
IC [7]
ICM: C07H021-04
EXF 536/24.3; 435/6; 435/810; 436/94
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d l11 ibib ab 1-40

L11 ANSWER 1 OF 40 USPATFULL

ACCESSION NUMBER:	2001:79295 USPATFULL		
TITLE:	Energy transfer hybridization assay composition		
INVENTOR(S):	Rabbani, Elazar, New York, NY, United States Hurley, Ian, Staten Island, NY, United States		
PATENT ASSIGNEE(S):	Enzo Diagnostics, Inc., Farmingdale, NY, United States (U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6239271	B1	20010529
APPLICATION INFO.:	US 1999-386695		19990831 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1995-486053, filed on 7 Jun 1995, now patented, Pat. No. US 5998135, issued on 7 Dec 1999 Continuation of Ser. No. US 1994-194215, filed on 9 Feb 1994, now abandoned Continuation of Ser. No. US 1989-314995, filed on 24 Feb 1989, now abandoned		
DOCUMENT TYPE:	Utility		
PRIMARY EXAMINER:	Horlick, Kenneth R.		
LEGAL REPRESENTATIVE:	Fedus, Esq., Ronald C., Rogers, Esq., James L.		
NUMBER OF CLAIMS:	22		
EXEMPLARY CLAIM:	1		
LINE COUNT:	740		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a nucleic acid hybridization assay composition for detecting the presence or absence of a target oligo- or polynucleotide in a sample. The composition comprises: a solid matrix having at least one surface which is substituted with a first intercalator capable of binding dsDNA, dsRNA, or DNA-RNA hybrids; a second intercalator, which may or may not comprise at least one fluorophore, said intercalator or

said fluorophore, each acting as either an energy donor or an energy acceptor; and an oligo- or polynucleotide probe which is specifically hybridizable with the target oligo- or polynucleotide and has directly or indirectly bound thereto, at least one lanthanide metal chelate or at least one fluorophore, each acting as either an energy donor or an energy acceptor. Also disclosed are a method and kit for its use.

L11 ANSWER 2 OF 40 USPATFULL

ACCESSION NUMBER:	2001:78896 USPATFULL
TITLE:	High throughput assay system
INVENTOR(S):	Kris, Richard M, Tucson, AZ, United States Felder, Stephen, Tucson, AZ, United States
PATENT ASSIGNEE(S):	High Throughput Genomics, Inc., Tucson, AZ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6238869	B1	20010529
APPLICATION INFO.:	US 1999-337325		19990621 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1998-218166, filed on 22 Dec 1998, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-68291	19971219 (60)

DOCUMENT TYPE:	Utility
PRIMARY EXAMINER:	Brusca, John S.
ASSISTANT EXAMINER:	Kim, Young
LEGAL REPRESENTATIVE:	Millen, White, Zelano & Branigan
NUMBER OF CLAIMS:	32
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	28 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT:	3409

AB The present invention relates to compositions, apparatus and methods useful for concurrently performing multiple, high throughput, biological or chemical assays, using repeated arrays of probes. A combination of the invention comprises a surface, which comprises a plurality of test regions, at least two of which, and in a preferred embodiment, at least twenty of which, are substantially identical, wherein each of the test regions comprises an array of generic anchor molecules. The anchors are associated with bifunctional linker molecules, each containing a portion which is specific for at least one of the anchors and a portion which is a probe specific for a target of interest. The resulting array of probes is used to analyze the presence or test the activity of one or more target molecules which specifically interact with the probes. In one embodiment of the invention, the test regions (which can be wells) are further subdivided into smaller subregions (indentations, or dimples).

L11 ANSWER 3 OF 40 USPATFULL

ACCESSION NUMBER:	2001:75129 USPATFULL
TITLE:	Process for detecting nucleic acids by mass determination
INVENTOR(S):	Bergmann, Frank, Iffeldorf, Germany, Federal Republic of Herrmann, Rupert, Weilheim, Germany, Federal Republic of Kobold, Uwe, Wielenbach, Germany, Federal Republic of
PATENT ASSIGNEE(S):	Dako A/S, Glostrup, Denmark (non-U.S. corporation)

	NUMBER	KIND	DATE

PATENT INFORMATION:	US 6235476	B1	20010522	
	WO 9807885		19980226	
APPLICATION INFO.:	US 1999-242536		19990317	(9)
	WO 1997-EP4494		19970818	
			19990317	PCT 371 date
			19990317	PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1996-19633436	19960820

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Horlick, Kenneth R.
LEGAL REPRESENTATIVE: Arent Fox Kintner Plotkin Kahn PLLC.
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 619
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for detecting nucleic acids by binding a probe P to a partial sequence S contained in the nucleic acid to produce a binding product B1, degrading the nucleic acid to produce a binding product B2 containing a partial nucleic acid F of a defined length and detecting the binding product B2 or the partial nucleic acid F a part based on its mass is particularly suitable for the parallel detection of nucleic acid of different sequences.

L11 ANSWER 4 OF 40 USPATFULL
ACCESSION NUMBER: 2001:71297 USPATFULL
TITLE: AC methods for the detection of nucleic acids
INVENTOR(S): Kayyem, Jon Faiz, Pasadena, CA, United States
O'Connor, Stephen D., Pasadena, CA, United States
PATENT ASSIGNEE(S): Clinical Micro Sensors, Inc., Pasadena, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6232062	B1	20010515	
APPLICATION INFO.:	US 1997-911589		19970814	(8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-873597, filed on 12 Jun 1997			

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-40155	19970307 (60)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Whisenant, Ethan
LEGAL REPRESENTATIVE: Flehr Hohbach Test Albritton & Herbert LLP, Trecartin, Richard F., Silva, Robin M.
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 56 Drawing Figure(s); 39 Drawing Page(s)
LINE COUNT: 4220
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to nucleic acids covalently coupled to electrodes via conductive oligomers. More particularly, the invention is directed to the site-selective modification of nucleic acids with electron transfer moieties and electrodes to produce a new class of biomaterials, and to methods of making and using them.

L11 ANSWER 5 OF 40 USPATFULL
ACCESSION NUMBER: 2001:51852 USPATFULL
TITLE: Method of conducting an assay of a sample containing an

analyte of interest

INVENTOR(S): Lakowicz, Joseph R., 10037 Fox Den Rd., Ellicott City, MD, United States 21042
Castellano, Felix, Columbia, MD, United States
Murtaza, Zakir, Baltimore, MD, United States

PATENT ASSIGNEE(S): Lakowicz, Joseph R., Ellicott City, MD, United States (U.S. individual)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6214628	B1	20010410
APPLICATION INFO.:	US 1998-7167		19980114 (9)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Le, Long V.
ASSISTANT EXAMINER: Cook, Lisa J.
LEGAL REPRESENTATIVE: Rothwell, Figg, Ernst & Manbeck, p.c.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 39 Drawing Figure(s); 29 Drawing Page(s)
LINE COUNT: 1382
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In accordance with the present invention, a method of conducting an assay of a sample containing an analyte of interest includes the step of forming a mixture so as to bring a metal-ligand complex into interactive proximity with the sample containing the analyte of interest. The mixture is irradiated with electromagnetic light energy so as to cause emission of light indicative of the analyte of interest. The emitted light is measured, and the measurement of the emitted light is utilized to measure the analyte of interest. The metal-ligand complex can be [Re(bcp)(CO).sub.3 (4-COOHPy)].sup.+, [Os(phen).sub.2 (aphen)].sup.2+, [Os(tpy)(triphos)].sup.2+, [Os(tppz).sub.2].sup.2+, and [Os(ttpy).sub.2].sup.2+, or the like. Also, the present invention is directed to a metal-ligand complex of the formula [Re(bcp)(CO).sub.3 (4-COOHPy)].sup.+.

L11 ANSWER 6 OF 40 USPATFULL
ACCESSION NUMBER: 2001:44388 USPATFULL
TITLE: Fluorescent dyes (AIDA) for solid phase and solution phase screening
INVENTOR(S): Auer, Manfred, Moedling, Austria
Gstach, Hubert, Vienna, Austria
PATENT ASSIGNEE(S): Novartis AG, Basel, Switzerland (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6207831	B1	20010327
APPLICATION INFO.:	US 1998-217795		19981221 (9)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Lambkin, Deborah C.
ASSISTANT EXAMINER: Wright, Sonya
LEGAL REPRESENTATIVE: Lopez, Gabriel
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1831
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to new fluorescent dyes of formula (I) ##STR1## which can be used in high throughput screening both, on the solid phase as well as in homogeneous solution.

L11 ANSWER 7 OF 40 USPATFULL
ACCESSION NUMBER: 2001:29375 USPATFULL

TITLE: Methods for monitoring the status of assays and immunoassays
INVENTOR(S): Buechler, Kenneth F., San Diego, CA, United States
Anderberg, Joseph M, Encinitas, CA, United States
McPherson, Paul H., Encinitas, CA, United States
PATENT ASSIGNEE(S): Biosite Diagnostics, Inc., San Diego, CA, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6194222	B1	20010227
APPLICATION INFO.:	US 1998-3065		19980105 (9)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Le, Long V.
ASSISTANT EXAMINER: Cook, Lisa V.
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Figure(s); 18 Drawing Page(s)
LINE COUNT: 3661
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates in part to the use of independent assay controls (IACs) for the optical communication between an assay device and an instrument in monitoring and performing assays, preferably immunoassays.

L11 ANSWER 8 OF 40 USPATFULL
ACCESSION NUMBER: 2000:157233 USPATFULL
TITLE: High throughput screening assay systems in microscale fluidic devices
INVENTOR(S): Parce, John Wallace, Palo Alto, CA, United States
Kopf-Sill, Anne R., Portola Valley, CA, United States
Bousse, Luc J., Menlo Park, CA, United States
PATENT ASSIGNEE(S): Caliper Technologies Corp., Mountain View, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6150180		20001121
APPLICATION INFO.:	US 1999-360782		19990726 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1996-671987, filed on 28 Jun 1996, now patented, Pat. No. US 5942443

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-15498	19960416 (60)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Chin, Christopher L.
ASSISTANT EXAMINER: Pham, Minh-Quan K.
LEGAL REPRESENTATIVE: Murphy, Matthew B., Shaver, Gulshan H.
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 17 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1480
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides novel microfluidic devices and methods that are useful for performing high-throughput screening assays. In particular, the devices and methods of the invention are useful in screening large numbers of different compounds for their effects on a variety of chemical, and preferably, biochemical systems.

L11 ANSWER 9 OF 40 USPATFULL
ACCESSION NUMBER: 2000:131592 USPATFULL
TITLE: Detection of nucleic acids and nucleic acid units
INVENTOR(S): Graham, Duncan, Edinburgh, United Kingdom
Linacre, Adrian Matthew Thornton, Glasgow, United

Kingdom
Munro, Callum Hugh, Pittsburgh, PA, United States
Smith, William Ewan, Glasgow, United Kingdom
Watson, Nigel Dean, Ayrshire, United Kingdom
White, Peter Cyril, Drymen, United Kingdom
PATENT ASSIGNEE(S): University of Strathclyde, Glasgow, United Kingdom (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6127120		20001003	
	WO 9705280		19970213	
APPLICATION INFO.:	US 1998-983486		19980421	(8)
	WO 1996-GB1830		19960725	
			19980421	PCT 371 date
			19980421	PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1995-17955	19950725

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Riley, Jezia
LEGAL REPRESENTATIVE: Dann, Dorfman, Herrell and Skillman
NUMBER OF CLAIMS: 47
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 22 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT: 2282
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to the detection of target nucleic acids or nucleic acid units in a sample, by obtaining a SER(R)S spectrum for a SER(R)S-active complex containing, or derived directly from, the target.

The complex includes at least a SER(R)S-active label, and optionally a target binding species containing a nucleic acid or nucleic acid unit. In this detection method, the concentration of the target present in the

SER(R)S-active complex, or of the nucleic acid or unit contained in the target binding species in the SER(R)S-active complex, is no higher than 10.sup.-10 moles per liter. Additionally or alternatively, one or more of the following features may be used with the method: i) the introduction of a polyamine; ii) modification of the target, and/or of the nucleic acid or nucleic acid unit contained in the target binding species, in a manner that promotes or facilitates its chemi-sorption onto a SER(R)S-active surface; iii) inclusion of a chemi-sorptive functional group in the SER(R)S-active label. The invention also provides SER(R)S-active complexes for use in such a method, a kit for use in carrying out the method or preparing the complexes and a method for sequencing a nucleic acid which comprises the use of the detection method to detect at least one target nucleotide or sequence of nucleotides within the acid.

L11 ANSWER 10 OF 40 USPATFULL
ACCESSION NUMBER: 2000:124833 USPATFULL
TITLE: Methods and devices for conducting specific binding assays
INVENTOR(S): Hargreaves, William R., Bellevue, WA, United States
PATENT ASSIGNEE(S): Roche Diagnostics Corporation, Indianapolis, IN, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6121055		20000919	
APPLICATION INFO.:	US 1995-430265		19950428	(8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1994-200944, filed on 23 Feb 1994, now abandoned which is a continuation of Ser.

No. US 1991-687850, filed on 19 Apr 1991 which is a division of Ser. No. US 1987-127944, filed on 1 Dec 1987, now abandoned which is a continuation-in-part of Ser. No. US 1995-768108, filed on 21 Aug 1995, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Chin, Christopher L.
LEGAL REPRESENTATIVE: Seed IP Law Group
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 2789
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides methods for separating bound label from unbound label within an assay mixture, for predispensing assay reactants in self-contained assay vessels, as well as for detecting the presence and/or amount of an analyte within a fluid sample. In addition, a reusable detection vessel for use therein and with specific binding assays in general is disclosed. In the methods, generally an analyte within a sample is detected or measured by forming an assay mixture containing sample, analyte binding components and label, placing the assay mixture in contact with an immisable primary layer, subjecting the assay mixture to conditions that separate the analyte bound with binding components and label from unbound binding components and label, and subsequently detecting bound label.

L11 ANSWER 11 OF 40 USPATFULL
ACCESSION NUMBER: 2000:121769 USPATFULL
TITLE: Method for enhancing fluorescence
INVENTOR(S): Zanzucchi, Peter John, Lawrenceville, NJ, United States
PATENT ASSIGNEE(S): Sarnoff Corporation, Princeton, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6118126		20000912
APPLICATION INFO.:	US 1998-187355		19981106 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1997-961860, filed on 31 Oct 1997
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Minnifield, Nita
ASSISTANT EXAMINER: Baskar, Padma
LEGAL REPRESENTATIVE: Burke, William J.
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 1538
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a method for the enhancement of fluorescence wherein a fluorophor is connected to a textured material. The method can be used in any forensic or medical diagnostic assay, particularly where the absence or presence of a molecule having a concentration of less than about 1 .mu.g/ml is desirably determined.

L11 ANSWER 12 OF 40 USPATFULL
ACCESSION NUMBER: 2000:92102 USPATFULL
TITLE: Method for the synthesis of pyrrole and imidazole carboxamides on a solid support
INVENTOR(S): Dervan, Peter B., San Marino, CA, United States
Baird, Eldon, Pasadena, CA, United States
PATENT ASSIGNEE(S): California Institute of Technology, Pasadena, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6090947		20000718	
APPLICATION INFO.:	US 1996-607078		19960226	(8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Higel, Floyd D.
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 49
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 50 Drawing Figure(s); 48 Drawing Page(s)
LINE COUNT: 4496
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention describes a novel method for the solid phase synthesis of polyamides containing imidazole and pyrrole carboxamides. The polyamides are prepared on a solid support from aromatic carboxylic acids and aromatic amines with high stepwise coupling yields (>99%), providing milligram quantities of highly pure polyamides. The present invention also describes the synthesis of analogs of the natural products Netropsin and Distamycin A, two antiviral antibiotics. The present invention also describes a novel method for the solid phase synthesis of imidazole and pyrrole carboxamide polyamide-oligonucleotide conjugates. This methodology will greatly increase both the complexity and quantity of minor-groove binding polyamides and minor-groove binding polyamide-oligonucleotide conjugates which can be synthesized and tested.

L11 ANSWER 13 OF 40 USPATFULL

ACCESSION NUMBER: 2000:92088 USPATFULL
TITLE: Methods of attaching conductive oligomers to electrodes
INVENTOR(S): Kayyem, Jon Faiz, Pasadena, CA, United States
O'Connor, Stephen D., Pasadena, CA, United States
Gozin, Michael, Beer Sheva, Israel
Yu, Changjun, Pasadena, CA, United States
Meade, Thomas J., Altadena, CA, United States
PATENT ASSIGNEE(S): Clinical Micro Sensors, Inc., Pasadena, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6090933		20000718	
APPLICATION INFO.:	US 1997-911085		19970814	(8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-873978, filed on 12 Jun 1997 which is a continuation of Ser. No. US 1996-743798, filed on 5 Nov 1996
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Marschel, Ardin H.
LEGAL REPRESENTATIVE: Trecartin, Esq., Richard F., Silva, Esq., Robin M.Flehr
Hohbach Test Albritton & Herbert LLP
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 44 Drawing Figure(s); 39 Drawing Page(s)
LINE COUNT: 4152
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to nucleic acids covalently coupled to electrodes via conductive oligomers. More particularly, the invention is directed to the site-selective modification of nucleic acids with electron transfer moieties and electrodes to produce a new class of biomaterials, and to methods of making and using them.

L11 ANSWER 14 OF 40 USPATFULL

ACCESSION NUMBER: 2000:61453 USPATFULL
TITLE: Sensors for sugars and other metal binding analytes
INVENTOR(S): Arnold, Frances H., Pasadena, CA, United States
Guan, Zhibin, Hockessin, DE, United States
Chen, Chao-Tsen, New York, NY, United States
Chen, Guohua, Pasadena, CA, United States
PATENT ASSIGNEE(S): California Institute of Technology, Pasadena, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6063637		20000516	
	WO 9733177		19970912	
APPLICATION INFO.:	US 1997-875047		19970707	(8)
	WO 1997-US3654		19970303	
			19970707	PCT 371 date
			19970707	PCT 102(e) date

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-571440, filed on 13 Dec 1995, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-12756	19960304 (60)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Soderquist, Arlen
LEGAL REPRESENTATIVE: Darby & Darby
NUMBER OF CLAIMS: 32
EXEMPLARY CLAIM: 17
NUMBER OF DRAWINGS: 38 Drawing Figure(s); 24 Drawing Page(s)
LINE COUNT: 2889
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Sensors (20, 50, 70) for use in detecting the presence of sugars and other analytes (target molecules). The sensor is composed of a metal complex that binds to the target molecule and releases a proton or includes an exchangable ligand which is exchanged for the target molecule during the binding interaction between the metal complex and the target molecule. The result of the binding interaction is the release of a proton, hydroxide ion or ligand species generated during the ligand exchange. Measurement of the release of proton, hydroxide ion or other ligand species from the sensor (20, 50, 70) provides an indirect indication of target molecule concentration. The metal complexes may be attached to support structures (10, 12) to provide both anchoring and positioning of the metal ions to increase selectivity of sugar/metal complex interactions. Detection systems in which pH is used as an indication of proton or hydroxide release are disclosed, as are detection systems in which Cl.sup.- release is used. Methods for monitoring the concentrations of sugars and related molecules using the metal based sensors (20, 50, 70) are also disclosed.

L11 ANSWER 15 OF 40 USPATFULL
ACCESSION NUMBER: 2000:61390 USPATFULL
TITLE: Cycling probe technology using electron transfer detection
INVENTOR(S): Kayyem, Jon Faiz, Pasadena, CA, United States
PATENT ASSIGNEE(S): Clinical Micro Sensors, Inc., Pasadena, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6063573		20000516	
APPLICATION INFO.:	US 1998-14304		19980127	(9)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Marschel, Ardin H.
LEGAL REPRESENTATIVE: Flehr Hohbach Test Albritton & Herbert LLP, Silva,

Robin M., Trecartin, Richard F.
NUMBER OF CLAIMS: 42
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 53 Drawing Figure(s); 48 Drawing Page(s)
LINE COUNT: 4975
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to novel methods and compositions useful in Cycling Probe Technology (CPT) using electron transfer to detect target nucleic acid sequences.

L11 ANSWER 16 OF 40 USPATFULL
ACCESSION NUMBER: 2000:47094 USPATFULL
TITLE: Optical chemical sensor based on multilayer self-assembled thin film sensors for aquaculture process control
INVENTOR(S): Luo, Shufang, Blacksburg, VA, United States
Lo, K. Peter, Blacksburg, VA, United States
Groger, Howard P., Gainesville, FL, United States
Churchill, Russell J., Radford, VA, United States
PATENT ASSIGNEE(S): American Research Corporation of Virginia, Radford, VA,
United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6051437		20000418	
APPLICATION INFO.:	US 1998-71775		19980504	(9)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Snay, Jeffrey
LEGAL REPRESENTATIVE: Wray, James Creighton, Narasimhan, Meera P.
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 46 Drawing Figure(s); 45 Drawing Page(s)
LINE COUNT: 1990
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Optical chemical probes have layers of anionic and cationic polyelectrolytes and one or more dyes incorporated into these layers. The probes are placed into the medium and the dye or dyes react in the presence of the corresponding chemical. Color changes may be observed manually or by a photo detector. A light source may be employed to increase the optical signal received from the probe. Further, a waveguide may be used to trap multiple optical signals. The invention is
used for chemical analysis.

L11 ANSWER 17 OF 40 USPATFULL
ACCESSION NUMBER: 2000:40901 USPATFULL
TITLE: High throughput screening assay systems in microscale fluidic devices
INVENTOR(S): Parce, J. Wallace, Palo Alto, CA, United States
Kopf-Sill, Anne R., Portola Valley, CA, United States
Bousse, Luc J., Menlo Park, CA, United States
PATENT ASSIGNEE(S): Caliper Technologies Corporation, Palo Alto, CA, United
States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6046056		20000404	
APPLICATION INFO.:	US 1996-761575		19961206	(8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-671987, filed on 28 Jun 1996

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-15498	19960416 (60)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Chin, Christopher L.
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew, LLP, Murphy, Matthew B., Quine, Jonathan Alan
NUMBER OF CLAIMS: 38
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Figure(s); 17 Drawing Page(s)
LINE COUNT: 1669
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides novel microfluidic devices and methods that are useful for performing high-throughput screening assays. In particular, the devices and methods of the invention are useful in screening large numbers of different compounds for their effects on a variety of chemical, and preferably, biochemical systems.

L11 ANSWER 18 OF 40 USPATFULL
ACCESSION NUMBER: 2000:34437 USPATFULL
TITLE: Raman spectroscopic method for determining the ligand binding capacity of biologicals
INVENTOR(S): Grow, Ann E., 5882 Highplace Dr., San Diego, CA, United States 92120

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6040191		20000321
APPLICATION INFO.:	US 1998-177548		19981022 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1997-864015, filed on 27 May 1997, now patented, Pat. No. US 5866430

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-19742	19960613 (60)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Weber, Jon P.
LEGAL REPRESENTATIVE: Beehler & Pavitt
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 3869
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A nondestructive process for determining the reactive capacity of a test biological by Raman scattering. The test biological may be any one of enzymes, enzyme cofactors, coenzymes, antibodies, antibody fragments, hemeproteins, peptides, synthetic peptides, toxins, toxoids, glycosphingolipids, lectins, lipids, lipid complexes, phospholipids, carbohydrates, saccharides, gangliosides, nucleic acids, fragments of nucleic acids, pathogen adhesion factors, receptors, receptor subunits, membranes, organelles, cells, tissues and complexes containing membranes, organelles, cells and tissues, or a bioconcentrator. The test biological is irradiated with a light source to produce a Raman scattering spectrum of the irradiated biological. The Raman scattering spectrum is collected and processed to determine the ability of the test biological to react with ligands. The analyzing step includes comparing the Raman scattering spectrum of the test biological against that of a biological standard of the same biological which has been altered to vary the capability to react with ligands thereby determining the capacity of the test biological to react with ligands.

L11 ANSWER 19 OF 40 USPATFULL
ACCESSION NUMBER: 2000:2826 USPATFULL
TITLE: Detection of biological molecules using chemical amplification and optical sensors

INVENTOR(S): Van Antwerp, William Peter, Valencia, CA, United States
Mastrototaro, John Joseph, Los Angeles, CA, United States
PATENT ASSIGNEE(S): Minimed Inc., Sylmar, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6011984		20000104
APPLICATION INFO.:	US 1996-752945		19961121 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-7515	19960926 (60)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Winakur, Eric F.
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 16 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1474
AB Methods are provided for the determination of the concentration of biological levels of polyhydroxylated compounds, particularly glucose. The methods utilize an amplification system that is an analyte transducer immobilized in a polymeric matrix, where the system is implantable and biocompatible. Upon interrogation by an optical system, the amplification system produces a signal capable of detection external to the skin of the patient. Quantitation of the analyte of interest is achieved by measurement of the emitted signal.

L11 ANSWER 20 OF 40 USPATFULL
ACCESSION NUMBER: 1999:164806 USPATFULL
TITLE: Detection of biological molecules using boronate-based chemical amplification and optical sensors
INVENTOR(S): Van Antwerp, William Peter, Valencia, CA, United States
Mastrototaro, John Joseph, Los Angeles, CA, United States
Lane, Stephen M., Oakland, CA, United States
Satcher, Jr., Joe H., Modesto, CA, United States
Darrow, Christopher B., Pleasanton, CA, United States
Peyser, Thomas A., Menlo Park, CA, United States
Harder, Jennifer, Livermore, CA, United States
PATENT ASSIGNEE(S): The Regents of the University of California, Oakland, CA, United States (U.S. corporation)
Minimed Inc., Sylmar, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6002954		19991214
APPLICATION INFO.:	US 1996-749366		19961121 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-7515	19951122 (60)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Winakur, Eric F.
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1565
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods are provided for the determination of the concentration of biological levels of polyhydroxylated compounds, particularly glucose. The methods utilize an amplification system that is an analyte transducer immobilized in a polymeric matrix, where the system is implantable and biocompatible. Upon interrogation by an optical system, the amplification system produces a signal capable of detection external to the skin of the patient. Quantitation of the analyte of interest is achieved by measurement of the emitted signal.

L11 ANSWER 21 OF 40 USPATFULL

ACCESSION NUMBER:	1999:159751 USPATFULL
TITLE:	Energy transfer hybridization assay using intercalators and lanthanide metals
INVENTOR(S):	Rabbani, Elazar, New York, NY, United States Hurley, Ian, Staten Island, NY, United States
PATENT ASSIGNEE(S):	Enzo Diagnostics, Inc., Farmingdale, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5998135		19991207
APPLICATION INFO.:	US 1995-486053		19950607 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1994-194215, filed on 9 Feb 1994, now abandoned which is a continuation of Ser. No. US 1989-314995, filed on 24 Feb 1989, now abandoned

DOCUMENT TYPE:	Utility
PRIMARY EXAMINER:	Horlick, Kenneth R.
LEGAL REPRESENTATIVE:	Fedus, Esq., Ronald C.
NUMBER OF CLAIMS:	53
EXEMPLARY CLAIM:	26
LINE COUNT:	876

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a nucleic acid hybridization assay composition for detecting the presence of absence of a target oligo- or polynucleotide in a sample. The composition comprises: a solid matrix having at least one surface which is substituted with a first intercalator capable of binding dsDNA dsRNA, or DAN-RNA hybrids; a second intercalator, which may or may not comprise at least one fluorophore, said intercalator or said fluorophore each acting as either an energy donor or an energy acceptor; and an oligo- or polynucleotide probe which is specifically hybridizable with the target oligo- or polynucleotide and has directly or indirectly bound thereto, at least one lanthanide metal chelate or at least one fluorophore, each acting as either an energy donor or an energy acceptor. Also disclosed are a method and kit for its use.

L11 ANSWER 22 OF 40 USPATFULL

ACCESSION NUMBER:	1999:137045 USPATFULL
TITLE:	Immunoassays in capillary tubes
INVENTOR(S):	Kumar, Amit, Milpitas, CA, United States Jang, Larry Sheldon, San Jose, CA, United States Leung, Danton Kai-Yu, Los Altos, CA, United States Rocco, Richard Michele, Sunnyvale, CA, United States Platshon, Mark Charles, Menlo Park, CA, United States
PATENT ASSIGNEE(S):	Idexx Laboratories, Inc., Westbrook, ME, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5976896		19991102
APPLICATION INFO.:	US 1996-688043		19960729 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-254302, filed

on 6 Jun 1994, now patented, Pat. No. US 5624850
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Chin, Christopher L.
ASSISTANT EXAMINER: Graser, Jennifer
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 29 Drawing Figure(s); 24 Drawing Page(s)
LINE COUNT: 2755
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A fluorescent immunoassay employing the interior surface of a capillary tube is provided. Devices to permit immunoassays using one or more capillary tubes, an apparatus for use with the devices, and a process for screening for analyte in a sample using the devices and apparatus are also provided. Samples suspected of containing analyte are added to a disposable self-contained sample tray containing one or more sample wells, mixed with a reagent, drawn into one or more spaced-apart capillary tubes held within a disposable cartridge connected to an analytical apparatus, reacted with a binding member on the surface of the capillary tube, washed to stop the reaction, and dried by the apparatus. The capillary tube is then exposed to a signal generation device to create a fluorescence signal that is detected using a signal detector. The apparatus determines the presence of the analyte and optionally determines the amount of analyte present in the sample, and presents the results to the operator.

L11 ANSWER 23 OF 40 USPATFULL
ACCESSION NUMBER: 1999:120765 USPATFULL
TITLE: Apparatus for laser alloying induced improvement of surfaces
INVENTOR(S): McCay, Thurman Dwayne, Winchester, TN, United States
McCay, Mary Helen, Winchester, TN, United States
Dahotre, Narendra B., Tullahoma, TN, United States
PATENT ASSIGNEE(S): The University of Tennessee Research Corporation, Knoxville, TN, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5961861		19991005
APPLICATION INFO.:	US 1997-932013		19970917 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1996-587553, filed on 17 Jan 1996, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Evans, Geoffrey S.
LEGAL REPRESENTATIVE: Rosenblatt & Redano P.C.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 907

AB A feedback control system for performing and controlling the **laser** alloying of a workpiece. The apparatus includes a **laser** beam delivery system, a movement system capable of causing relative movement between a **laser** beam and a workpiece being irradiated by the **laser** beam, a precursor application system capable of applying a precursor at a desired rate to the surface of a moving workpiece, and a control system capable of receiving input **signals** indicative of one or more **measured** process parameters, processing those **signals**, and transmitting a control signal capable of controlling the **laser** beam delivery system, movement system, and/or precursor application system. Other embodiments of the invention utilize a variety of process parameter measuring devices in conjunction with the control system. These devices include, but are not limited to, temperature transducers, infrared detectors, and emission spectra measuring devices.

L11 ANSWER 24 OF 40 USPATFULL

ACCESSION NUMBER: 1999:99591 USPATFULL
TITLE: High throughput screening assay systems in microscale fluidic devices
INVENTOR(S): Parce, John Wallace, Palo Alto, CA, United States
Kopf-Sill, Anne R., Portola Valley, CA, United States
Bousse, Luc J., Menlo Park, CA, United States
PATENT ASSIGNEE(S): Caliper Technologies Corporation, Palo Alto, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5942443		19990824	
APPLICATION INFO.:	US 1996-671987		19960628	(8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-15498	19960416 (60)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Housel, James C.
ASSISTANT EXAMINER: Portner, Ginny Allen
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew, Murphy, Matthew B., Quine, Jonathan Alan
NUMBER OF CLAIMS: 71
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 17 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1730
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Microfluidic devices and methods that are useful for performing high-throughput screening assays. In particular, the devices and methods of the invention are useful in screening large numbers of different compounds for their effects on a variety of chemical, and preferably, biochemical systems.

L11 ANSWER 25 OF 40 USPATFULL
ACCESSION NUMBER: 1999:67276 USPATFULL
TITLE: Two-photon upconverting dyes and applications
INVENTOR(S): Prasad, Paras N., Williamsville, NY, United States
Bhawalkar, Jayant D., Tonawanda, NY, United States
He, Guang S., Williamsville, NY, United States
Zhao, Chan F., San Diego, CA, United States
Gvishi, Raz, K. Tiron, Israel
Ruland, Gary E., Grand Island, NY, United States
Zieba, Jaroslaw, Santa Rosa, CA, United States
Cheng, Ping Chin, Williamsville, NY, United States
Pan, Shan Jen, Amherst, NY, United States
PATENT ASSIGNEE(S): The Research Foundation of State university of New York, Amherst, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5912257		19990615	
APPLICATION INFO.:	US 1996-712143		19960905	(8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-3296	19950906 (60)
	US 1995-5924	19951027 (60)
	US 1995-10330	19951215 (60)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Davis, Zinna Northington
LEGAL REPRESENTATIVE: Nixon, Hargrave, Devans & Doyle LLP
NUMBER OF CLAIMS: 80
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 34 Drawing Figure(s); 34 Drawing Page(s)

LINE COUNT: 6013
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Styryl dyes and compositions which exhibit superior two-photon absorption cross-sections and are useful in two-photon pumped cavity lasing, two-photon pumped upconversion lasing, optical power limiting, optical power stabilization, optical signal reshaping, and infrared beam detection and indication are disclosed. Also disclosed are multiphasic nanostructured composites which include a glass having pores, an optically active coating material on the pore surface, and a polymeric material in the pores. These composites are useful in producing multifunctional optical materials, such as broadly tunable lasers. Methods for killing cells and viruses using a photosensitizer and a two-photon upconverting dye are also described. These methods are especially useful to kill cells and viruses in biological materials, such as in photodynamic therapy of tumors and cancers or blood purification protocols. Media and methods for recording data in a three-dimensional matrix which includes a plurality of dye molecules is also described. The data storage methods and media have approximately 10.sup.12 volume elements per square centimeter, and each of the volume elements can store a single bit, digital information, or analog information. The data storage methods and media of the present invention are particularly useful for storing or archiving a series of two-dimensional black and white or color images, such as frames of a movie.

L11 ANSWER 26 OF 40 USPATFULL
ACCESSION NUMBER: 1999:15786 USPATFULL
TITLE: Raman optrode processes and devices for detection of chemicals and microorganisms
INVENTOR(S): Grow, Ann E., 5882 Highplace Dr., San Diego, CA, United States 92120

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5866430		19990202	
APPLICATION INFO.:	US 1997-864015		19970527	(8)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1996-19742	19960613 (60)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Weber, John P.
LEGAL REPRESENTATIVE: Beehler & Pavitt
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 3934
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A methodology and devices for detecting or monitoring or identifying chemical or microbial analytes are described. The methodology comprises four basic steps: (1) The gas or liquid medium to be monitored or analyzed is brought into contact with a bioconcentrator which is used to bind with or collect and concentrate one or more analytes. (2) The bioconcentrator-analyte complex is then exposed to radiation of one or more predetermined wavelengths to produce Raman scattering spectral bands. (3) At least a portion of the Raman spectral bands are collected and processed by a Raman spectrometer to convert the same into an electrical signal. And (4) the electrical signal is processed to detect and identify, qualitatively and/or quantitatively, the analyte(s). The methodology of this invention may also comprise Raman reactive capacity analysis of the bioconcentrator itself, simultaneously with or independently from the detection of the analyte, to determine the

potential ability of the bioconcentrator to complex with analytes; the results of this latter analysis may be used to affect or alter or modify the methodology involved in detection and analysis of the analytes. Also the invention is accomplished by a Raman Optrode comprising: a bioconcentrator capable of binding with the analyte(s); a mechanism or procedure or device for bringing the gas or liquid sample into contact with the bioconcentrator; a light source suitable for generating Raman scattering; a Raman spectrometer capable of collecting and processing the Raman scattering spectral information and translating it into an electrical signal; and electronic hardware and software for analyzing the electrical signal and translating the signal into information on the presence, identity and/or quantity of the bound analytes. Various forms of bioconcentrators are described, as well as a variety of analytes which may be detected, monitored, or identified by this invention, and a variety of devices which can be fabricated based on this invention.

L11 ANSWER 27 OF 40 USPATFULL

ACCESSION NUMBER:	1998:138641 USPATFULL
TITLE:	Methods for measuring telomere length
INVENTOR(S):	Kozlowski, Michael R., Palo Alto, CA, United States Prowse, Karen R., Groningen, Netherlands Wang, Sy-Shi, Burlingame, CA, United States Wong, Sharon, San Jose, CA, United States Kim, Nam Woo, San Jose, CA, United States Allsopp, Richard, Menlo Park, CA, United States
PATENT ASSIGNEE(S):	Geron Corporation, Menlo Park, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5834193		19981110
APPLICATION INFO.:	US 1996-660402		19960607 (8)

RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-479916, filed on 7 Jun 1995, now abandoned
DOCUMENT TYPE:	Utility
PRIMARY EXAMINER:	Zitomer, Stephanie W.
LEGAL REPRESENTATIVE:	Kaster, Kevin R., Stracker, Elaine C.
NUMBER OF CLAIMS:	9
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT:	1906

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and compositions for the measurement of telomere length have application in medical diagnostic, prognostic, and therapeutic procedures. The methods for measuring telomere length include primer extension-based methods and probe-based methods. The primer extension methods involve elongation of telomeric, linker, and/or subtelomeric based primers under conditions such that the telomere serves as a template for primer extension and that the resultant primer extension products can be compared to standards of known length to provide a measure of telomere length. The probe based methods allow for telomere length measurements using DNA from lysed or whole cells and involve hybridizing an excess of probe to all telomeric repeat sequences in the telomere, measuring the amount of bound probe, and correlating the amount of bound probe measured with telomere length.

L11 ANSWER 28 OF 40 USPATFULL

ACCESSION NUMBER:	1998:131533 USPATFULL
TITLE:	Nucleic acid detection with energy transfer
INVENTOR(S):	Sammes, Peter George, Farnham Royal, United Kingdom Garman, Andrew John, Chester, United Kingdom
PATENT ASSIGNEE(S):	Zeneca Limited, London, England (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5827653		19981027	
	WO 9508642		19950330	
APPLICATION INFO.:	US 1996-619724		19960520	(8)
	WO 1994-GB2068		19940923	
			19960520	PCT 371 date
			19960520	PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1993-19826	19930923
	GB 1994-12106	19940616

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Sisson, Bradley L.
LEGAL REPRESENTATIVE: Cushman Darby & Cushman Intellectual Property Group of Pillsbury Madison & Sutro, LLP
NUMBER OF CLAIMS: 33
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 1807
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for the detection of a nucleic acid analyte by complementary probe hybridisation and formation of a chelated lanthanide complex which, upon irradiation by light, results in a characteristic delayed luminescence emission.

L11 ANSWER 29 OF 40 USPATFULL
ACCESSION NUMBER: 97:70876 USPATFULL
TITLE: Luminescent lanthanide chelates and methods of use
INVENTOR(S): Selvin, Paul R., Berkeley, CA, United States
Hearst, John, Berkeley, CA, United States
PATENT ASSIGNEE(S): The Regents of the University of California, Oakland, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5656433		19970812	
APPLICATION INFO.:	US 1996-762288		19961209	(8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-269162, filed on 29 Jun 1994, now patented, Pat. No. US 5622821			

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Marschel, Ardin H.
LEGAL REPRESENTATIVE: Osman, Richard Aron
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1243
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides lanthanide chelates capable of intense luminescence. The celates comprise a lanthanide chelator covalently joined to a coumarin-like or quinolone-like sensitizer. Exemplary sensitizers include 2- or 4-quinolones, 2- or 4-coumarins, or derivatives thereof e.g. carbostyril 124 (7-amino-4-methyl-2-quinolone), coumarin 120 (7-amino-4-methyl-2-coumarin), coumarin 124 (7-amino-4-(trifluoromethyl)-2-coumarin), aminomethyltrimethylpsoralen, etc.

The chelates form high affinity complexes with lanthanides, such as terbium or europium, through chelator groups, such as DTPA. The chelates may be coupled to a wide variety of compounds to create specific labels, probes, diagnostic and/or therapeutic reagents, etc. The chelates find

particular use in resonance energy transfer between chelate-lanthanide complexes and another luminescent agent, often a fluorescent non-metal based resonance energy acceptor. The methods provide useful information about the structure, conformation, relative location and/or interactions of macromolecules.

L11 ANSWER 30 OF 40 USPATFULL

ACCESSION NUMBER:	97:51868 USPATFULL
TITLE:	Luminescent lanthanide chelates and methods of use
INVENTOR(S):	Selvin, Paul R., Berkeley, CA, United States Hearst, John, Berkeley, CA, United States
PATENT ASSIGNEE(S):	The Regents of the University of California, Oakland, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5639615		19970617
APPLICATION INFO.:	US 1996-762598		19961209 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1994-269162, filed on 29 Jun 1994, now patented, Pat. No. US 5622821		
DOCUMENT TYPE:	Utility		
PRIMARY EXAMINER:	Marschel, Ardin H.		
LEGAL REPRESENTATIVE:	Osman, Richard Aron		
NUMBER OF CLAIMS:	20		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	6 Drawing Figure(s); 4 Drawing Page(s)		
LINE COUNT:	1215		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides lanthanide chelates capable of intense luminescence. The celates comprise a lanthanide chelator covalently joined to a coumarin-like or quinolone-like sensitizer. Exemplary sensitzers include 2- or 4-quinolones, 2- or 4-coumarins, or derivatives thereof e.g. carbostyril 124 (7-amino-4-methyl-2-quinolone), coumarin 120 (7-amino-4-methyl-2-coumarin), coumarin 124 (7-amino-4-(trifluoromethyl)-2-coumarin), aminomethyltrimethylpsoralen, etc.

The chelates form high affinity complexes with lanthanides, such as terbium or europium, through chelator groups, such as DTPA. The chelates may be coupled to a wide variety of compounds to create specific labels, probes, diagnostic and/or therapeutic reagents, etc. The chelates find particular use in resonance energy transfer between chelate-lanthanide complexes and another luminescent agent, often a fluorescent non-metal based resonance energy acceptor. The methods provide useful information about the structure, conformation, relative location and/or interactions of macromolecules.

L11 ANSWER 31 OF 40 USPATFULL

ACCESSION NUMBER:	97:33616 USPATFULL
TITLE:	Luminescent lanthanide chelates and methods of use
INVENTOR(S):	Selvin, Paul R., Berkeley, CA, United States Hearst, John, Berkeley, CA, United States
PATENT ASSIGNEE(S):	The Regents of the University of California, Oakland, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5622821		19970422
APPLICATION INFO.:	US 1994-269162		19940629 (8)
DOCUMENT TYPE:	Utility		
PRIMARY EXAMINER:	Marschel, Ardin H.		
LEGAL REPRESENTATIVE:	Osman, Richard Aron		

NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1254
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides lanthanide chelates capable of intense luminescence. The celates comprise a lanthanide chelator covalently joined to a coumarin-like or quinolone-like sensitizer. Exemplary sensitzers include 2- or 4-quinolones, 2- or 4-coumarins, or derivatives thereof e.g. carbostyril 124 (7-amino-4-methyl-2-quinolone), coumarin 120 (7-amino-4-methyl-2-coumarin), coumarin 124 (7-amino-4-(trifluoromethyl)-2-coumarin), aminomethyltrimethylpsoralen, etc.

The chelates form high affinity complexes with lanthanides, such as terbium or europium, through chelator groups, such as DTPA. The chelates may be coupled to a wide variety of compounds to create specific labels, probes, diagnostic and/or therapeutic reagents, etc. The chelates find particular use in resonance energy transfer between chelate-lanthanide complexes and another luminescent agent, often a fluorescent non-metal based resonance energy acceptor. The methods provide useful information about the structure, conformation, relative location and/or interactions of macromolecules.

L11 ANSWER 32 OF 40 USPATFULL
ACCESSION NUMBER: 96:60602 USPATFULL
TITLE: Fluorescent viability assay using cyclic-substituted unsymmetrical cyanine dyes
INVENTOR(S): Millard, Paul J., Eugene, OR, United States
Roth, Bruce L., Corvallis, OR, United States
Yue, Stephen T., Eugene, OR, United States
Haugland, Richard P., Eugene, OR, United States
PATENT ASSIGNEE(S): Molecular Probes, Inc., Eugene, OR, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5534416		19960709
APPLICATION INFO.:	US 1993-148847		19931108 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-90890, filed on 12 Jul 1993, now patented, Pat. No. US 5436134 And Ser. No. US 1993-146328, filed on 1 Nov 1993 , each which is a continuation-in-part of Ser. No. US 1993-47683, filed on 13 Apr 1993, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Kight, John
ASSISTANT EXAMINER: Leary, Louise N.
LEGAL REPRESENTATIVE: Helfenstein, Allegra J., Skaugset, Anton E.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1908
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to a method of analyzing the viability of a sample of cells using an aqueous solution comprising two fluorescent dyes. Dye I has the formula: ##STR1## where R.sup.2 is C.sub.1-6 alkyl; Z.sup.- is a biologically compatible counterion;

X is O; S; Se; or NR.sup.15, where R.sup.15 is H or C.sub.1-6 alkyl; or CR.sup.16 R.sup.17, where R.sup.16 and R.sup.17, which may be the same or different, are independently H or C.sub.1-6 alkyl, or the carbons of R.sup.16 and R.sup.17 taken in combination complete a five or six membered saturated ring; and the benzazolium is optionally further substituted;

n=0, 1, or 2;

Y is --CR.sup.3 .dbd.CR.sup.4 --; p and m=0 or 1, such that p+m=1;

R.sup.5 is a C.sub.1-6 alkyl, C.sub.1-6 alkenyl, C.sub.1-6 polyalkenyl, C.sub.1-6 alkynyl or C.sub.1-6 polyalkynyl group; or R.sup.5 is an OMEGA;

R.sup.3, R.sup.4, R.sup.6 and R.sup.7, which may be the same or different, are independently H; or a C.sub.1-6 alkyl, C.sub.1-6 alkenyl, C.sub.1-6 polyalkenyl, C.sub.1-6 alkynyl or C.sub.1-6 polyalkynyl group; or halogen; or --OR.sup.8, --SR.sup.8, --(NR.sup.8 R.sup.9), where R.sup.8 and R.sup.9, which may be the same or different, are independently H; or alkyl groups having 1-6 carbons; or 1-2 substituted or unsubstituted alicyclic, heteroalicyclic, aromatic, or heteroaromatic rings, containing 1-4 heteroatoms, wherein the heteroatoms are O, N, or S; or R.sup.8 and R.sup.9 taken in combination are --(CH.sub.2).sub.2 --L--(CH.sub.2).sub.2 -- where L=--O--, --NR.sup.10 --, --CH.sub.2 -- or a single bond where R.sup.10 is H or an alkyl group having 1-6 carbons; or --OSO.sub.2 R.sup.19 where R.sup.19 is C.sub.1-6 alkyl, or C.sub.1-6 perfluoroalkyl, or aryl; or an OMEGA; or R.sup.6 and R.sup.7, taken in combination are --(CH.sub.2).sub.v -- where v=3 or 4, or R.sup.6 and R.sup.7 form a fused aromatic ring that is optionally further substituted;

such that at least one of R.sup.3, R.sup.4, R.sup.5, R.sup.6 and R.sup.7, or a substituent on the aromatic ring formed by R.sup.6 and R.sup.7, is an OMEGA; where OMEGA is a cyclic substituent that is attached by a single bond.

Fluorescent Dye II selectively stains either viable or non-viable cells with a detectable fluorescent response that is different from the fluorescent response of Dye I. The stained cells are illuminated at a suitable absorption wavelength, and the fluorescent response is detected to distinguish viable and non-viable cells based on the fluorescent response.

L11 ANSWER 33 OF 40 USPATFULL

ACCESSION NUMBER:	96:16883 USPATFULL
TITLE:	Immunodiagnostic assay using liposomes carrying labels thereof on outer liposome surface
INVENTOR(S):	Carbonell, Ruben G., Cary, NC, United States Kilpatrick, Peter K., Cary, NC, United States Jones, Matthew A., Raleigh, NC, United States Singh, Anup K., Raleigh, NC, United States
PATENT ASSIGNEE(S):	North Carolina State University, Raleigh, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5494803		19960227
APPLICATION INFO.:	US 1994-273280		19940711 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1991-795910, filed on 19 Nov 1991, now abandoned		

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Scheiner, Toni R.
ASSISTANT EXAMINER: Parsons, Nancy J.
LEGAL REPRESENTATIVE: Bell, Seltzer, Park & Gibson
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 16 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1473
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Competitive and sandwich-type immunodiagnostic assays can be configured by use of liposomes carrying detectible markers (e.g., fluorophores) or catalysts thereof (e.g., enzymes) on the outer liposome surface. The liposome also contains at least one antigen or antibody allowing it to bind to a complementary, immobilized antibody or antigen on a support.

L11 ANSWER 34 OF 40 USPATFULL
ACCESSION NUMBER: 94:95433 USPATFULL
TITLE: Molecular analytical release tags and their use in chemical analysis
INVENTOR(S): Giese, Roger W., Quincy, MA, United States
PATENT ASSIGNEE(S): Northeastern University, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5360819		19941101	
APPLICATION INFO.:	US 1985-710318		19850311	(6)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1982-344394, filed on 1 Feb 1982, now patented, Pat. No. US 4709016
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Killos, Paul J.
LEGAL REPRESENTATIVE: Weingarten, Schurgin, Gagnebin & Hayes
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 1583
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A release tag reagent suitable for use in the chemical analysis of a substance to be detected, which substance contains **reactive** groups, such as for, but not limited to gas **phase** detection groups, which reagent comprises three covalently bonded groups: a signal group which on release provides a ketone signal compound to be detected, a release group which may be cleaved to release the ketone signal group, which release group contains, for example, a vic glycol or an olefin group and a **reactivity** group which is **reactive** with a **reactive** group of the substance to be detected.

L11 ANSWER 35 OF 40 USPATFULL
ACCESSION NUMBER: 91:33116 USPATFULL
TITLE: Immunoassay using optical interference detection
INVENTOR(S): Nicoli, David F., 448 Mills Way, Goleta, CA, United States 93117
Elings, Virgil B., 1155 Via Tranquilla, Santa Barbara, CA, United States 93110

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 33581		19910430	
	US 4647544		19870303	(Original)
APPLICATION INFO.:	US 1987-72699		19870713	(7)
	US 1984-624460		19840625	(Original)

DOCUMENT TYPE: Reissue
PRIMARY EXAMINER: Nucker, Christine
LEGAL REPRESENTATIVE: Walker, William B., Terlizzi, Laura

NUMBER OF CLAIMS: 40
EXEMPLARY CLAIM: 49
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 1674
AB Apparatus and method for providing an optical detection of a binding reaction between a ligand and an antiligand, including, a pattern formed by a spatial array of microscopic dimensions of antiligand material, ligand material interacting with the antiligand material to produce a binding reaction between the ligand and the antiligand in the pattern, a source of optical radiation including energy at at least one wavelength directed to the pattern at a particular incidence angle to produce scattering of the energy from the pattern in accordance with the binding reaction and with a strong scattering intensity at one or more Bragg scattering angles, and at least one optical detector located relative to the pattern and aligned with a Bragg scattering angle to detect the strong scattering intensity at the Bragg scattering angle to produce a signal representative of the binding reaction.

L11 ANSWER 36 OF 40 USPATFULL
ACCESSION NUMBER: 89:78671 USPATFULL
TITLE: Analyte detection by means of energy transfer
INVENTOR(S): Stavrianopoulos, Jannis, New York, NY, United States
Rabbani, Elazar, New York, NY, United States
Abrams, Samuel B., New York, NY, United States
Wetmur, James G., Scardsdale, NY, United States
PATENT ASSIGNEE(S): Enzo Biochem, Inc., New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4868103		19890919	
APPLICATION INFO.:	US 1986-831250		19860219	(6)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Brown, Johnnie R.
ASSISTANT EXAMINER: Jay, Jeremy M.
LEGAL REPRESENTATIVE: Mosoff, Serle I., Tzagoloff, Helen
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 1656
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method is disclosed to detect the presence of an analyte. The method involves forming a complex comprising the analyte and a binding entity. The binding entity comprises a first partner of an energy transfer system. The complex is then contacted with a reporting entity to form a unit. The reporting entity comprises a second partner of the energy transfer system. The first partner and the second partner are within Furster's radius of each other in the formed unit. The unit is irradiated with energy which can only be absorbed by one of said partners, namely, the energy donor, which then emits fluorescent energy. Some of this energy is absorbed by the other of said partners, namely, the energy acceptor, which also emits fluorescent energy. However, the fluorescent energy of the energy acceptor is of longer wavelength and in addition may be of substantially greater duration than the fluorescent energy of the energy donor. The detection of fluorescence at the longer wavelength or after a given time interval verifies the presence of the analyte.

L11 ANSWER 37 OF 40 USPATFULL
ACCESSION NUMBER: 89:30047 USPATFULL

TITLE: Lifetime-resolved assay procedures
INVENTOR(S): Morrison, Larry E., Lisle, IL, United States
PATENT ASSIGNEE(S): Amoco Corporation, Chicago, IL, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4822733		19890418	
APPLICATION INFO.:	US 1985-738560		19850528	(6)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Warden, Robert J.
ASSISTANT EXAMINER: Benson, Robert
LEGAL REPRESENTATIVE: Janiuk, Anthony J., Magidson, William H., Medhurst, Ralph C.
NUMBER OF CLAIMS: 67
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1636
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Improved luminescent lifetime-resolved association assay techniques for detection of analytes in samples using two photophore-labelled probes, the photophores of which have different emissive lifetimes. One of the photophores is excitable by a modulated energy source to an excited state from which energy may be transferred to the other photophore when in close poximity thereto resulting in excitation and emission of the other photophore. Methods according to the invention involve associating the first photophore-labelled probe with the analyte and associating the second photophore-labelled probe with the analyte or first probe in a reaction mixture bringing the photophores in sufficient proximity to allow energy transfer to occur. The reaction mixture is formed, excited by the modulated energy source and monitored for emission of the photophore excited by energy transfer at a time beyond the emissive lifetime of the shorter-lived photophore.

L11 ANSWER 38 OF 40 USPATFULL
ACCESSION NUMBER: 89:12832 USPATFULL
TITLE: Ligand-receptor assays employing squarate dye compositions
INVENTOR(S): Berger, Jr., Donald E., San Jose, CA, United States
Tarnowski, Thomas L., So. San Francisco, CA, United States
Ullman, Edwin F., Atherton, CA, United States
PATENT ASSIGNEE(S): Syntex (U.S.A.) Inc., Palo Alto, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4806488		19890221	
APPLICATION INFO.:	US 1985-773401		19850906	(6)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Warden, Robert J.
ASSISTANT EXAMINER: Wieder, Stephen C.
LEGAL REPRESENTATIVE: Leitereg, Theodore J.
NUMBER OF CLAIMS: 82
EXEMPLARY CLAIM: 44
LINE COUNT: 1497
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel assays for ligands and receptors employing novel compounds that are conjugates of squarates dyes and members of a specific binding pair (sbp) are disclosed. The sbp members are selected from the group consisting of ligand and its complementary receptor. The sbp member is covalently or non-covalently bound to the squarate dye, which usually has an absorption maximum greater than 600 nanometers. The novel conjugates are employed in assays for determining the presence or amount

of an sbp member analyte in a sample suspected of containing such analyte. Kits comprising such novel conjugates are also disclosed.

L11 ANSWER 39 OF 40 USPATFULL
ACCESSION NUMBER: 87:18702 USPATFULL
TITLE: Method of chemical analysis employing molecular release
tag compounds
INVENTOR(S): Giese, Roger W., 56 Oakland Ave., Quincy, MA, United States 02170

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4650750		19870317
APPLICATION INFO.:	US 1984-591262		19840319 (6)

RELATED APPLN. INFO.: Division of Ser. No. US 1982-344394, filed on 1 Feb 1982
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Wiseman, Thomas G.
ASSISTANT EXAMINER: Teskin, Robin Lyn
LEGAL REPRESENTATIVE: Weingarten, Schurgin, Gagnebin & Hayes
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 582
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method of chemical analysis is disclosed which employs a release tag compound of general formula

Rx--Re--S

in which Rx is a reactivity group capable of forming a covalent bond with another molecule, Re is a release group capable of being cleaved, and S is a signal group. The release tag is covalently bonded to a substance of interest which is to be determined in the course of a chemical analysis for an analyte, release group Re is cleaved at an appropriate point in the analytical procedure, and signal group S is determined, thereby determining the substance of interest. Where the substance of interest is the analyte, determination of S determines the analyte. Where the substance of interest is not the analyte but is related to the analyte concentration, determination of S allows indirect determination of analyte.

L11 ANSWER 40 OF 40 USPATFULL
ACCESSION NUMBER: 87:15235 USPATFULL
TITLE: Immunoassay using optical interference detection
INVENTOR(S): Nicoli, David F., 448 Mills Way, Goleta, CA, United States 93017
Elings, Virgil B., 1155 Via Tranquila, Santa Barbara, CA, United States 93110

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4647544		19870303
APPLICATION INFO.:	US 1984-624460		19840625 (6)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Nucker, Christine M.
ASSISTANT EXAMINER: Wieder, Stephen C.
LEGAL REPRESENTATIVE: Schwartz, Charles H., Roston, Ellsworth R.
NUMBER OF CLAIMS: 48
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 1551
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Apparatus and method for providing an optical detection of a binding reaction between a ligand and an antiligand, including, a pattern formed

by a spatial array of microscopic dimensions of antiligand material, ligand material interacting with the antiligand material to produce a binding reaction between the ligand and the antiligand in the pattern, a

source of optical radiation including energy at least one wavelength directed to the pattern at a particular incidence angle to produce scattering of the energy from the pattern in accordance with the binding

reaction and with a strong scattering intensity at one or more Bragg scattering angles, and at least one optical detector located relative to

the pattern and aligned with a Bragg scattering angle to detect the strong scattering intensity at the Bragg scattering angle to produce a signal representative of the binding reaction.